

April-29-15 2:25:55 PM

Page 1

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Item Name: Manifold Assembly

Start Date: 1/28/15 **Start Qty:** 6.00 ***6***

Cust Item ID:

Required Date: 1/28/15 **Req'd Qty:** 6.00 ***6***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1*

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4131	C								
100	Weld per dwg A/R S.S. rod Batch:	M123823	0.00						
100						8		EC 15-5-4	
Large Fab	Memo		0.00						
Large Fab									
110	QC9- Inspect visual per QSI004- Fusion Welds		0.00						
110						(8) 1506.05			DAS 9 9-89
QC	Memo		0.00						
Quality Control									
120	QC5- Inspect part completeness to step on W/O		0.00						
120						(8) 1506.05			DAS 9 9-89
QC	Memo		0.00						
Quality Control									

Work Order ID 129029

129029

Page 2

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Item ID: D4131-041 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Manifold Assembly
 Start Date: 1/28/15 Start Qty: 6.00 *6* Cust Item ID:
 Required Date: 1/28/15 Req'd Qty: 6.00 *6* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
124		0.00							
124									
Small Fab	Memo	0.00							
Small Fab	ASSEMBLE LABEL PLATE AS PER DWG (D4131-045)								
126	QC5- Inspect part completeness to step on W/O	0.00							
126									
QC	Memo	0.00							
Quality Control									
130	Identify as per dwg & Stock Location: <u>ST093</u>	0.00							
130									
Packaging	Memo	0.00							
Packaging									

DAS
36
9-89

DAS
38
9-89

MAY 06 2015

DAS
26
9-89

April-29-15 2:25:55 PM

Item ID: D4131-041

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Manifold Assembly

Stop *NS2*

Start Date: 1/28/15 **Start Qty:** 6.00

6

Cust Item ID:

Required Date: 1/28/15 **Req'd Qty:** 6.00

6

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/
Work Center ID

Operation Description

Set Up/ Run Hours

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
---------	--------	-----------	------------	------------	---------------	-------------

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.00

Quality Control

MLS MAY 06 2015

Picklist Print

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Page 1

Work Order ID: 129029

129029

Parent Item: D4131-041

D4131-041

Parent Item Name: Manifold Assembly

Start Date: 1/28/15

Required Date: 1/28/15

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP Rev:A 10.10.06 new issue DD verf:EC
11.09.26 AS PER REV.B DD verf:EC

IPP Rev:B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D4131-1		Manufactured	No			100	Each	15.0000	1	6			
---------	--	--------------	----	--	--	-----	------	---------	---	---	--	--	--

D4131-1

Front Plate

Q 15-4-29

Location

Loc Qty

Loc Code

WA001

15

128067

9

129780

6

6

D4131-3		Manufactured	No			100	Each	21.0000	1	6			
---------	--	--------------	----	--	--	-----	------	---------	---	---	--	--	--

D4131-3

Base

Q 15-4-29

Location

Loc Qty

Loc Code

ST093

9

127188

1

129030

8

ST095

12

128246

12

5

D4131-5		Manufactured	No			100	Each	23.0000	2	12			
---------	--	--------------	----	--	--	-----	------	---------	---	----	--	--	--

D4131-5

Side Plate

Q 15-4-29

Location

Loc Qty

Loc Code

WA001

13

128068

1

128274

6

129031

6

WA002

10

130515

10

1

1

10

Picklist Print

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Page 2

Work Order ID: 129029

129029

Parent Item: D4131-041

D4131-041

Parent Item Name: Manifold Assembly

Start Date: 1/28/15

Required Date: 1/28/15

Start Qty: 6.00

Required Qty: 6.00

D4131-9	Manufactured	No	124	Each	17.0000	1	6			
D4131-9										
Label Plate										

**

DAS
36
9-89

15/05/05

Location

Loc Qty

Loc Code

GA

17

128152

17

MS20615-3M3

Purchased

No

124

Each

2,209.000

2

12

MS20615-3M3
RIVET

**

DAS
36
9-89

15/05/05

Location

Loc Qty

Loc Code

ST307

2209

124859

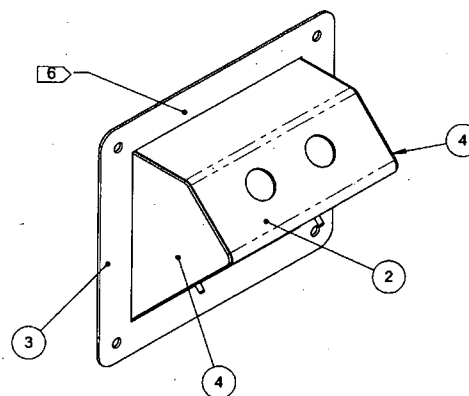
2205

m131340

4

16

ITEM	QTY -041	P/N	DESCRIPTION
1	X	D4131-041	MANIFOLD ASSEMBLY
2	1	D4131-045	BASE ASSEMBLY
3	1	D4131-1	FRONT PLATE
4	2	D4131-5	SIDE PLATE



D4131-041 MANIFOLD ASSEMBLY

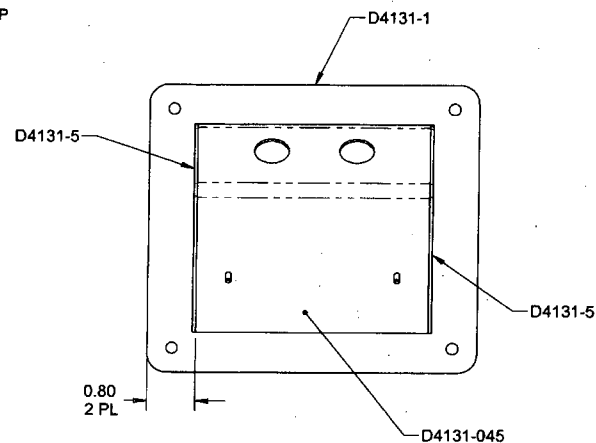
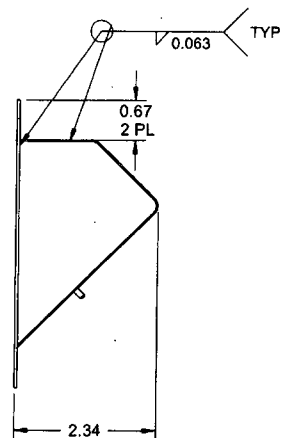
RELEASED
2014-10-20

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: PER QSI 044 6.1
- 7) WEIGHT: 0.66 lbs

C	ADD Ø0.191 HOLE DIMENSION (ZN B1-9); REF PAR14-364	RF	14.09.08
B	D4131-045 WAS D4131-3 (ZN D3-1); ADD 4131-045 (ZN B4-3); ADD Ø0.098 (ZN B4-7); ADD 4131-9 (ZN B5-10)	RF	11.07.27
A	NEW ISSUE	RF	10.09.16
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE USA, INC. KENT, WA	
DRAWN	RF		
CHECKED	VS	DRAWING NO. D4131 REV. C	
MFG. APPR.	JFS		
APPROVED	HS	TITLE MANIFOLD ASSEMBLY SCALE NTS	
DE APPR.	DS		
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APPROVED



D4131-041 MANIFOLD ASSEMBLY
(AUXILIARY VIEW)

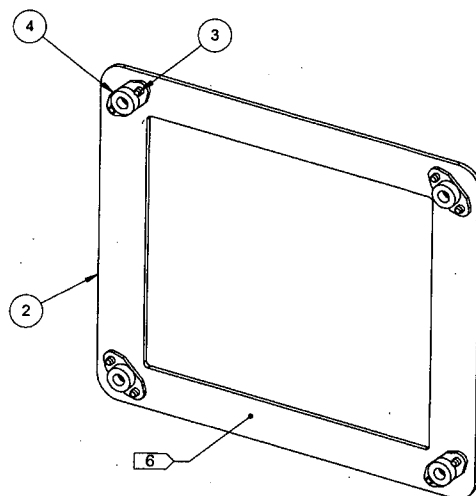
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: PER QSI 044 6.1
- 7) WEIGHT: 0.66 lbs
- 8) WELD PER DART QSI 004

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2014-10-29

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	DRAWN	RF	KENT, WA	
	CHECKED	VS	DRAWING NO.	REV. C
	MFG. APPR.	JFS	D4131	SHEET 2 OF 10
	APPROVED	HS	TITLE	SCALE
	DE APPR.	DS	MANIFOLD ASSEMBLY	NTS
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ITEM	QTY -043	P/N	DESCRIPTION
1	X	D4131-043	DOUBLER ASSEMBLY
2	1	D4131-7	SIDE PLATE
3	8	MS20426AD3-3	RIVET, SOLID, CSK
4	4	MS21069L3	NUT PLATE, SELF-LOCKING



D4131-043 DOUBLER ASSEMBLY

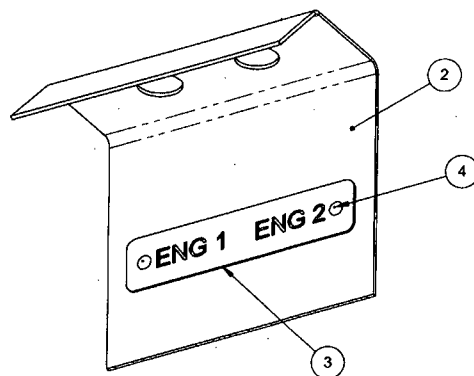
RELEASED
2014-10-28

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: PER QSI 044 6.1
- 7) WEIGHT: 0.07 lbs

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	MFG. APPR.	JFS	D4131	SHEET 3 OF 10
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	DE APPR.	DS	MANIFOLD ASSEMBLY	NTS
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ITEM	QTY -045	P/N	DESCRIPTION
1	X	D4131-045	BASE ASSEMBLY
2	1	D4131-3	BASE
3	1	D4131-9	LABEL PLATE
4	2	MS20615-3M3	RIVET, SOLID, PAN-HEAD



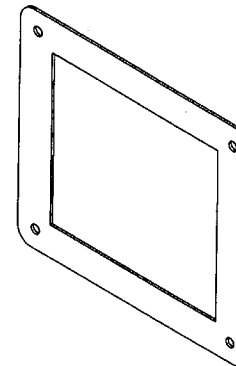
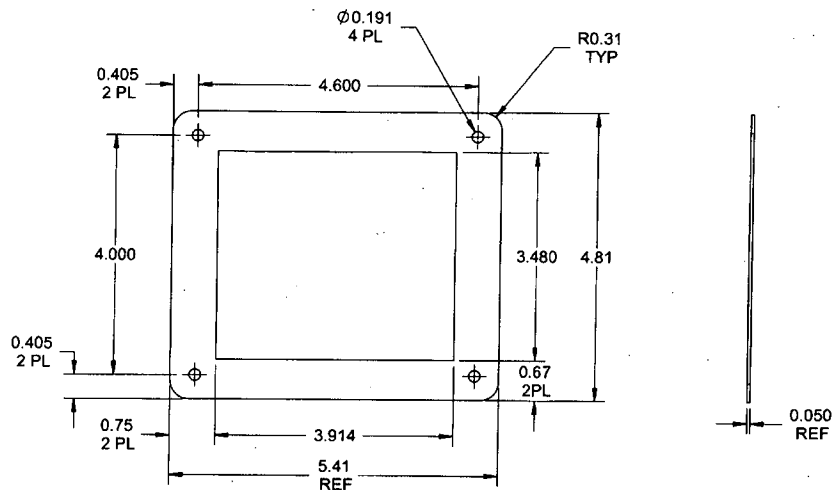
D4131-045 BASE ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.35 lbs

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2014-10-20
[Signature]

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	DRAWN	RF		
	CHECKED	VS	DRAWING NO. D4131	REV. C
	MFG. APPR.	JFS	SHEET 4 OF 10	
	APPROVED	HS	TITLE	SCALE
	DE APPR.	DS-#	MANIFOLD ASSEMBLY	NTS
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D4131-1 FRONT PLATE

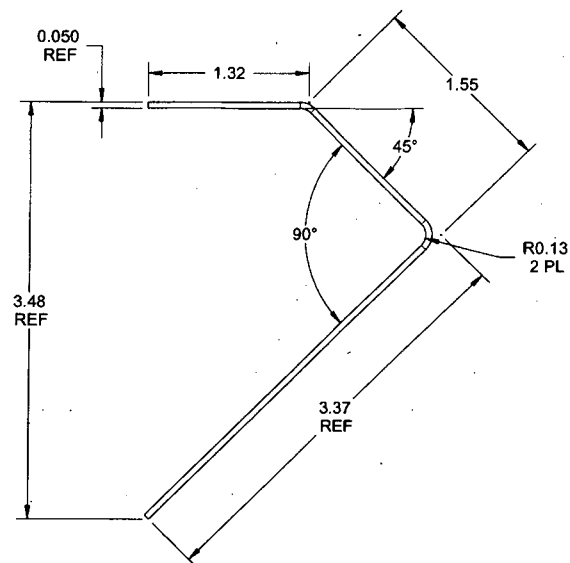
NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL ANNEALED 2B FINISH 0.050 (18 GAUGE) SHEET
PER MIL-S-5059
OR AMS 5513 (304)
OR AMS 5524 (316)
OR ASTM A240
OR ASME SA240
PER DART SPEC. M304S18GA
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.18 lbs

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2014-10-20
WJ

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DRAWN	RF		
CHECKED	VS	DRAWING NO.	REV. C
MFG. APPR.	JFS	D4131	SHEET 5 OF 10
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D4131-3 BASE
(MAKE FROM D4131-3F FLAT PATTERN)

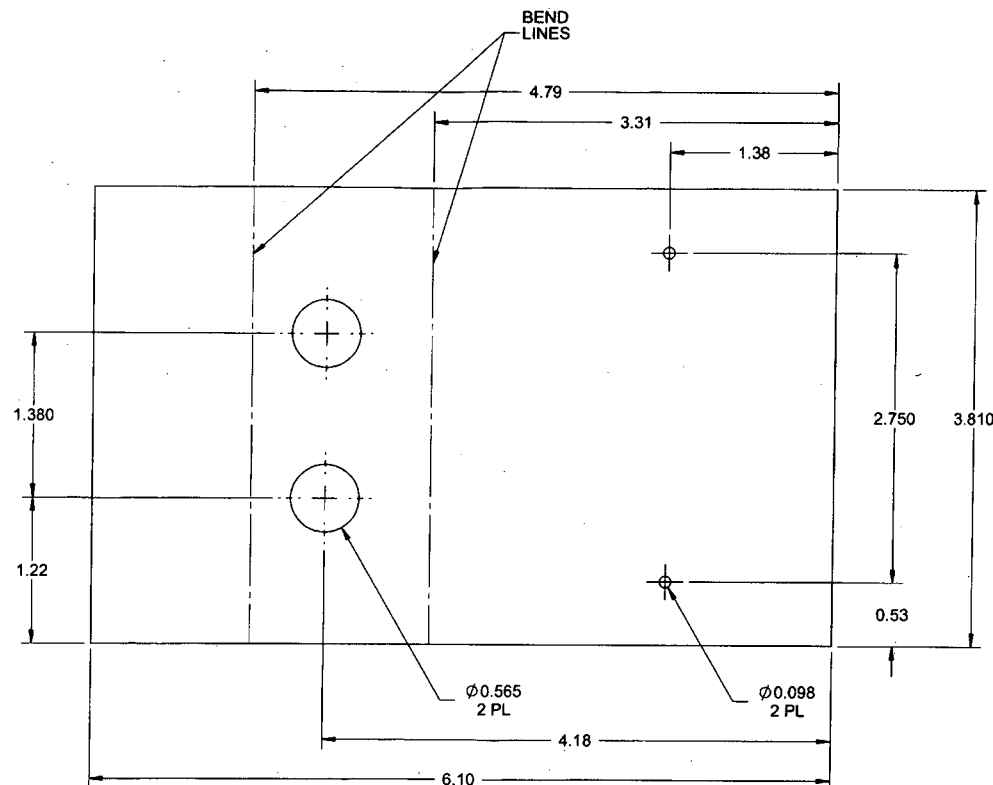
NOTES:

- 1) MATERIAL: MAKE FROM D4131-3F FLAT PATTERN
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.33 lbs

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2014 -10- 20

DESIGN	RF	DART AEROSPACE USA, INC. KENT, WA	
DRAWN	RF		
CHECKED	VS	DRAWING NO.	REV. C
MFG. APPR.	JFS	D4131	SHEET 8 OF 10
APPROVED	HS	TITLE	SCALE
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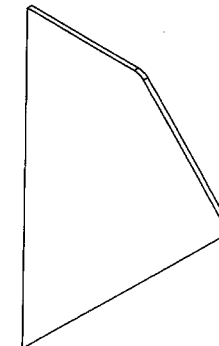
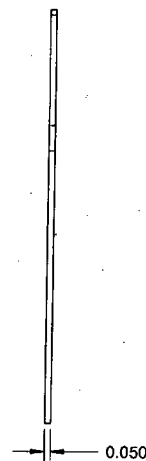
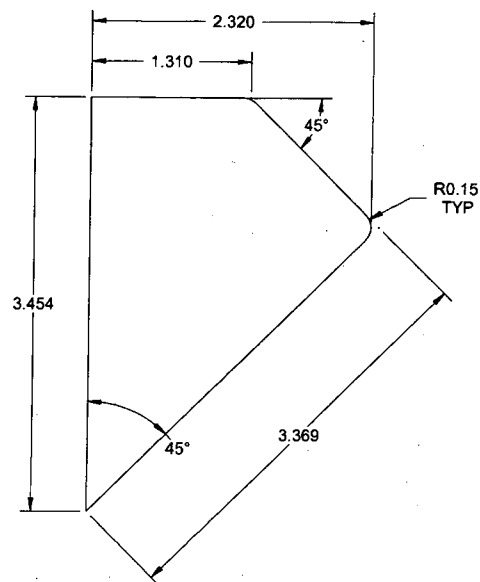
D4131-3F FLAT PATTERN

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL ANNEALED 2B FINISH 0.050 (18 GAUGE) SHEET
PER MIL-S-5059
OR AMS 5513 (304)
OR AMS 5524 (316)
OR ASTM A240
OR ASME SA240
PER DART SPEC. M304S18GA
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.33 lbs

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2014-10-20
mm

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	DRAWN	RF		
	CHECKED	VS	DRAWING NO.	REV. C
	MFG. APPR.	JFS	D4131	SHEET 7 OF 10
	APPROVED	HS	TITLE	SCALE
	DE APPR.	DS	MANIFOLD ASSEMBLY	NTS
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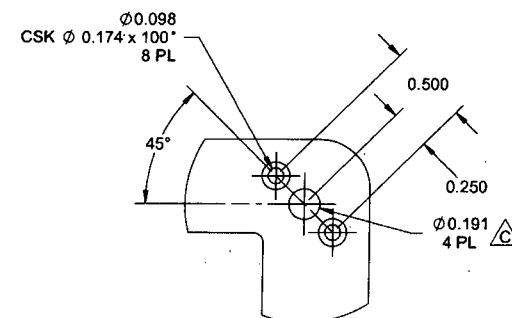
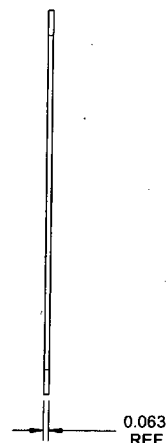
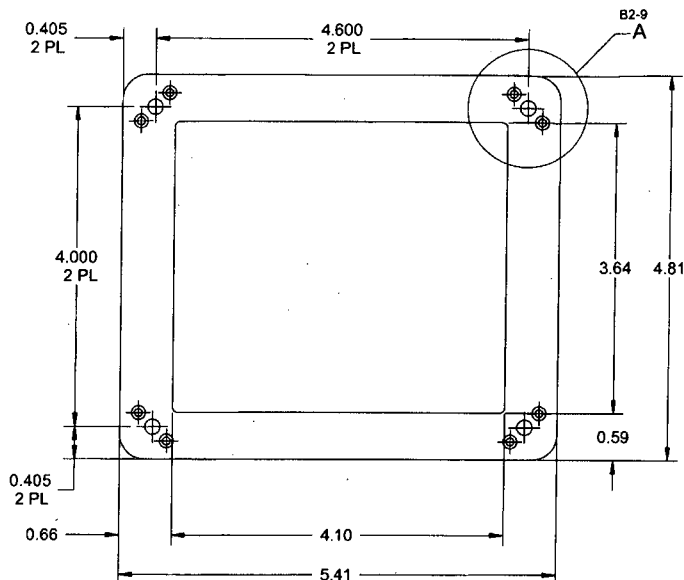
D4131-5 SIDE PLATE

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL ANNEALED 2B FINISH 0.050 (18 GAUGE) SHEET
PER MIL-S-5059
OR AMS 5513 (304)
OR AMS 5524 (316)
OR ASTM A240
OR ASME SA240
PER DART SPEC. M304S18GA
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.07 lbs

RELEASED
2014-10-20

APPROVED	DESIGN	RF	DART AEROSPACE USA, INC. KENT, WA	
	DRAWN	RF		
	CHECKED	VS	DRAWING NO.	REV. C
	MFG. APPR.	JFS	D4131	SHEET 8 OF 10
	APPROVED	HS	TITLE	SCALE
	DE APPR.	DS	MANIFOLD ASSEMBLY	NTS
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DETAIL A D5-9
TYPICAL

D4131-7 PLATE

NOTES:

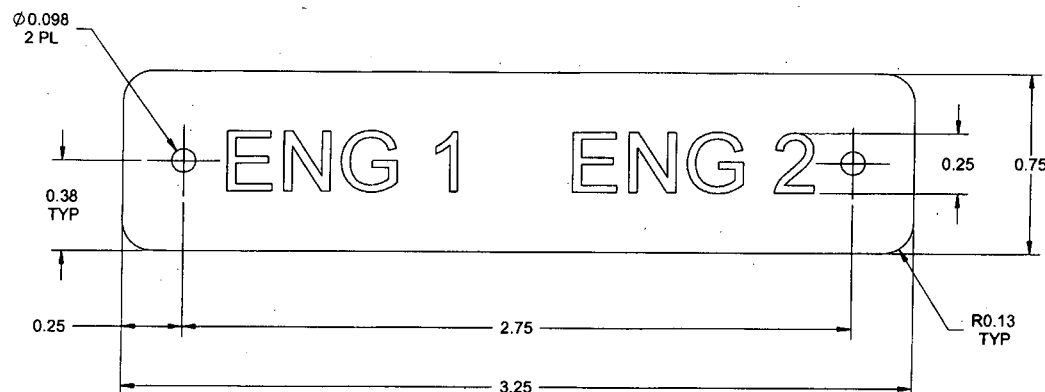
- 1) MATERIAL: 6061-T6/T62 ALUMINUM SHEET 0.063 THICK
PER QQ-A-250/11 OR AMS-QQ-A-250/11
OR AMS 4025 OR AMS4027
OR ASTM B209
PER DART SPEC. M6061T6S0.063
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.07 lbs

RELEASED
2014 -10- 20

APPROVED

DESIGN	RF	DART AEROSPACE USA, INC.	
DRAWN	RF	KENT, WA	
CHECKED	VS	DRAWING NO.	REV. C
MFG. APPR.	JFS	D4131	SHEET 9 OF 10
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	MANIFOLD ASSEMBLY	NTS
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ENG 1 ENG 2



D4131-9 LABEL PLATE

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL ANNEALED 2B FINISH 0.030 (22 GAUGE) SHEET
PER MIL-S-5059
OR AMS 5513 (304)
OR AMS 5524 (316)
OR ASTM A240
OR ASME SA240
PER DART SPEC. M304S22GA
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.02 lbs

RELEASED
2014-10-20

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DESIGN	RF	DART AEROSPACE USA, INC. KENT, WA	
DRAWN	RF		
CHECKED	VS	DRAWING NO.	REV. C
MFG. APPR.	JFS	D4131	SHEET 10 OF 10
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	MANIFOLD ASSEMBLY	NTS
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